

Homework #5 McKinney CE311K

Subprocedure Problems - I

Problem 1. Text, Chapter 5-1, page 178, Problem 1

```
Time's fun when you're having flies.  
Kermit the frog
```

Problem 2. Text, Chapter 5-1, page 178, Problem 4

```
Hello GEORGE  
How are you today?
```

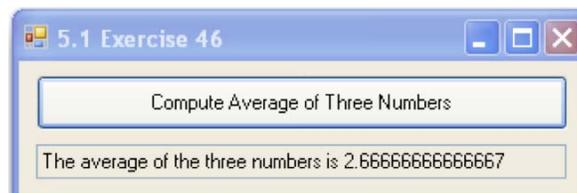
Problem 3. Text, Chapter 5-1, page 181, Problem 18

```
640 acres in a square mile
```

Problem 4. Text, Chapter 5-1, page 182, Problem 20

```
The balance after 1 year is 108
```

Problem 5. Text, Chapter 5-1, page 187, Problem 46



```
Private Sub btnCompute_Click(ByVal sender As System.Object, ByVal e As System.  
    Dim num1, num2, num3 As Double  
    'Display the average of three numbers  
    num1 = CDb1(TextBox1.Text)  
    num2 = CDb1(TextBox2.Text)  
    num3 = CDb1(TextBox3.Text)  
    Average(num1, num2, num3)  
End Sub
```

```
Sub Average(ByVal num1 As Double, ByVal num2 As Double, ByVal num3 As Double)  
    'Display the average of the three numbers.  
    Dim avg As Double  
    avg = (num1 + num2 + num3) / 3  
    txtOutput.Text = "The average of the three numbers is " & avg  
End Sub
```

Problem 6. Text, Chapter 5-1, page 188, Problem 48



```
Private Sub btnDisplay_Click(ByVal sender As System.Object, ByVal e As Sys
'Print the user's approximate age in years and in days.
'Assume today is 12/31/2008.
Dim birthYr As Integer
birthYr = CInt(txtBox.Text)
lstOutput.Items.Clear()
ShowYears(birthYr)
ShowDays(birthYr)
End Sub

Private Sub ShowYears(ByVal birthYr As Integer)
'Display age in years
Dim yrs As Integer
yrs = 2008 - birthYr
lstOutput.Items.Add("You are now " & yrs & " years old.")
End Sub

Private Sub ShowDays(ByVal birthYr As Integer)
'Display approximate age in days
Dim days As Integer
days = (2008 - birthYr) * 365
lstOutput.Items.Add("You have lived for more than " & days & " days.")
End Sub

...

```

Subprocedure Problems - II

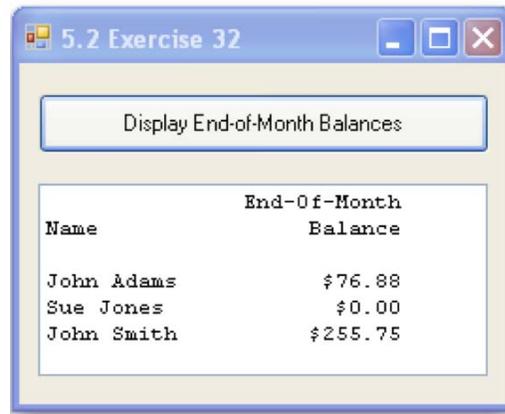
Problem 7. Text, Chapter 5-2, page 198, Problem 8

Approximate Annual Wage: \$20,000.00

Problem 8. Text, Chapter 5-2, page 200, Problem 18

With tax, price is \$210.00

Problem 9. Text, Chapter 5-2, page 203, Problem 32



```
Public Class frmBalances

    Dim fmtStr As String = "{0,-15}{1,12:C}"

    Private Sub btnDisplay_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) 1
        'Display end-of-month credit card balances
        Dim sr As IO.StreamReader = IO.File.OpenText("CHARGES.TXT")
        Dim name As String = ""
        lstOutput.Items.Clear()
        DisplayHeader()
        GetData_DisplayBalance(sr)
        GetData_DisplayBalance(sr)
        GetData_DisplayBalance(sr)
        sr.Close()
    End Sub

    Sub DisplayHeader()
        lstOutput.Items.Add(String.Format(fmtStr, "", "End-Of-Month"))
        lstOutput.Items.Add(String.Format(fmtStr, "Name", "Balance"))
        lstOutput.Items.Add("")
    End Sub

    Sub GetData_DisplayBalance(ByVal sr As IO.StreamReader)
        Dim name As String
        Dim balance, beginBal, purchases, payment As Double
        name = sr.ReadLine
        beginBal = Cdbl(sr.ReadLine)
        purchases = Cdbl(sr.ReadLine)
        payment = Cdbl(sr.ReadLine)
        ComputeBalance(beginBal, purchases, payment, balance)
        'Display the balance
        lstOutput.Items.Add(String.Format(fmtStr, name, balance))
    End Sub

    Sub ComputeBalance(ByVal beginBal As Double, ByVal purch As Double, _
        ByVal payment As Double, ByRef endBal As Double)
        'Compute the balance
        Dim financeChg As Double 'finance charges
        financeChg = 0.015 * beginBal
        endBal = financeChg + beginBal + purch - payment
    End Sub

End Class
```